



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/560,205	04/28/2000	Peter V. Boesen, M.D.	P04425US0	3361

7590

07/23/2004

Zarley Mckee Thomte Voorhees & Sease PLC
Suite 3200
801 Grand Avenue
Des Moines, IA 50309

EXAMINER

NASSER, ROBERT L

ART UNIT

PAPER NUMBER

3736

DATE MAILED: 07/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/560,205	BOESEN, M.D., PETER V.	
	Examiner	Art Unit	
	Robert L. Nasser	3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-17 and 32-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-17 and 32-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-7, 10-14, 16, 17, 32, 33, and 35 are rejected under 35

U.S.C. 103(a) as being obvious over Wilk 5660005 in view of Thomasson 5557681 and Callahan et al 5467775. In figures 8 and 9, Wilk shows a device including a housing 202 that contains a acoustic transducer 206 for measuring heart and/or lung sounds, a transmitter 216 in communication with the transducer 206, which broadcasts a signal that is modulated by the transducer output, a display 232 secured to the housing for displaying a representation of the transducer output. The housing is capable of being selectively placed at various locations on the body. Wilk has a memory at the receiver location for storing original acoustic signals, but not in the housing. The device of Wilk has a protuberance. However, Thomasson shows a similar stethoscopic device that has a housing with such a protuberance. Hence, it would have been obvious to modify Wilk to use to configuration of Thomasson, as it is merely the substitution of one known equivalent configuration for another. Callahan further teaches storing the acoustic signals in a memory 160 located in the housing containing the transducer for later retrieval and/or comparison. Hence, it would have been obvious to modify Wilk to use such a memory, to allow the on site physician

Art Unit: 3736

better access to patient data. The examiner notes that there is a receiver 222 that receives the signal from transmitter 216, with a computer 248 connected to the receiver. Claims 5 and 6 are rejected in that although Wilk is silent as to the structure of the acoustic transducer, Callahan teaches a transducer for the identical purpose that is a bell with a diaphragm. Hence, it would have been obvious to modify Wilk to use such transducer, as it is merely the substitution of one known equivalent transducer for another. Claim 7 is rejected in that a sound sensor is a blood pressure transducer in a korotkoff sound method, e.g. it indicates systolic and diastolic pressure based on sound signals. Claims 10-14 are rejected in that the combination also teaches the method. Claims 16 and 17 are rejected in that the signal will attenuate, e.g. reduce in amplitude over any distance. With respect to claims 35, the signal will reduce to a negligible level over a predetermines distance, for example, 100 miles.

Claims 4 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilk in view of Thomasson and Callahan et al as applied to claims 1-3, 5-7, 10-14, 16, 17, 32, 33, and 35 above, and further in view of Fruscello. Fruscello further teaches that it is known in acoustic monitoring devices to include a temperature sensor to sense skin temperature. Therefore, it would have been obvious to modify the above combination to use a temperature sensor, to provide the physician with a more complete picture of the patient's condition.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wilk in view of Thomasson and Callahan et al as applied to claims 1-3, 5-7, 10-

Art Unit: 3736

14, 16, 17, 32, 33, and 35 above, and further in view of Eisenberg et al. Wilk teaches that it can be used to measure heart or lung or cardiovascular sounds. Eisenberg shows an identical device and teaches that it can also be used to measure bowel sounds. Hence, it would have been obvious to modify the above combination to measure bowel sounds, as it is merely using the device for an alternate well known use in the art.

Applicant's arguments filed 5/13/2004 have been fully considered but they are deemed moot in view of the new grounds of rejection. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 3736

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert L. Nasser whose telephone number is (703) 308-3251. The examiner can normally be reached on Mon-Fri, variable hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (703) 308-3130. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Robert L. Nasser
Primary Examiner
Art Unit 3736

RLN
July 21, 2004

ROBERT L. NASSER
PRIMARY EXAMINER